

Amendment and Response
Serial No.: 10/643,748
Confirmation No.: 4133
Filed: 19 August 2003
For: DENTAL ARTICLE FORMS AND METHODS

RECEIVED
CENTRAL FAX CENTER
OCT 27 2006

Page 9 of 13

Remarks

The Office Action mailed 27 June 2006 has been received and reviewed as well as the Advisory Action dated 16 October 2006. Claims 1, 16, 28, and 39 having been amended, claims 1-9, 11-39, and 42-44 remain pending. Reconsideration and withdrawal of the rejections are respectfully requested.

Interview Summary and Advisory Action

Applicants thank the Examiner for the courtesy extended during the telephone conference on 27 October 2006 between Examiner Wilson and Applicants' Representative, Ann Mueting. During the telephone conference, the definition of self-supporting in the specification and possible claim amendments were discussed.

Applicants thank the Examiner for acknowledging that the drawing and specification amendments are accepted, and that the rejection of claims 39 and 42-44 under 35 U.S.C. §103(a) and claim 18 under 35 U.S.C. §112, second paragraph rejections have been overcome. Since the Examiner did not reference the 35 U.S.C. §103(a) rejection of claims 1-9, 11-39, and 42-44 over Simor in view of Neustadter, Ivanov et al., and Wilson, Applicants believe that this rejection has also been overcome. Notification to this effect is respectfully requested.

Obviousness-Type Double Patenting Rejection

Claims 1-9, 11-39, and 42-44 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-78 of copending Application No. 10/219,398 in view of Neustadter (U.S. Patent No. 3,565,387). Upon an indication of otherwise allowable subject matter and in the event this rejection is maintained, Applicants will provide an appropriate response.

Amendment and Response

Serial No.: 10/643,748

Confirmation No.: 4133

Filed: 19 August 2003

For: **DENTAL ARTICLE FORMS AND METHODS**

Page 10 of 13

Applicants' Invention

Each of Applicants' claims recites a dental article form that includes an organic composition (including a surfactant system mixed therein) in the form of a self-supporting structure having a first shape and sufficient malleability to be formed into a second shape. This is describing the organic composition that is used to make the dental article form (as opposed to the hardenable dental material that is placed within the reservoir of the dental article form).

The term "self-supporting" means that the composition is dimensionally stable and will maintain its shape (e.g., preformed shape of a crown form) without significant deformation at room temperature (i.e., about 20°C to about 25°C) for at least about two weeks when free-standing (i.e., without the support of packaging or a container). Preferably, the compositions of the present invention are dimensionally stable at room temperature for at least about one month, and more preferably, for at least about six months. Preferably, the compositions of the present invention are dimensionally stable at temperatures above room temperature, more preferably up to about 40°C, even more preferably up to about 50°C, and even more preferably up to about 60°C. This definition applies in the absence of conditions that activate an initiator system (if present) and in the absence of an external force other than gravity.

The term "sufficient malleability" means that the self-supporting structure is capable of being custom shaped and fitted, for example, to a patient's mouth, under a moderate force (i.e., a force that ranges from light finger pressure to that applied with manual operation of a small hand tool, such as a dental composite instrument). Herein, the phrase "malleable" refers to a material that is malleable under conditions in the mouth or that can be comfortably withstood by oral tissue (e.g., temperature and/or oral fluids, including water).

The 35 U.S.C. §103 Rejections

The Examiner rejected claims 1-9, 11, 12, 16-24, 26, 28-35, and 37 under 35 U.S.C. §103(a) as being unpatentable over Kennedy (U.S. Patent No. 4,129,946) in view of Neustadter et al. (U.S. Patent No. 3,565,387) and Ivanov et al. (U.S. Patent No. 4,113,499). The Examiner

Amendment and Response

Serial No.: 10/643,748

Confirmation No.: 4133

Filed: 19 August 2003

For: DENTAL ARTICLE FORMS AND METHODS

Page 11 of 13

rejected claims 13, 14, 25, and 36 under 35 U.S.C. §103(a) as being unpatentable over Kennedy (U.S. Patent No. 4,129,946) in view of Neustadter et al. (U.S. Patent No. 3,565,387) and Ivanov et al. (U.S. Patent No. 4,113,499) as applied to claims 1, 16, and 28 above, and further in view of Uthoff (U.S. Patent No. 5,102,332). The Examiner rejected claims 15, 27, and 38 under 35 U.S.C. §103(a) as being unpatentable over Kennedy (U.S. Patent No. 4,129,946) in view of Neustadter et al. (U.S. Patent No. 3,565,387) and Ivanov et al. (U.S. Patent No. 4,113,499) as applied to claims 1, 16, and 28 above, and further in view of Kahn (U.S. Patent No. 3,949,476). These rejections are respectfully traversed.

The combination of the three documents, Kennedy in view of Neustadter et al. and Ivanov et al., does not teach or suggest Applicants' claimed invention. That is, the combination of the three documents does not teach or suggest a dental article form having all of the recited characteristics. For example, the combination of the three documents does not provide a dental article form that is both self-supporting and malleable and includes a reservoir that is capable of being filled with one or more hardenable dental materials. Thus, it is respectfully submitted that this combination of documents does not provide a *prima facie* case of obviousness.

Although Neustadter et al. may define a malleable material, Kennedy does not disclose a "self-supporting" dental article form, as defined by Applicants' specification at page 5, lines 3-7 ("The term "self-supporting" means that the composition is dimensionally stable and will maintain its shape (e.g., preformed shape of a crown form) without significant deformation at room temperature (i.e., about 20°C to about 25°C) for at least about two weeks when free-standing (i.e., without the support of packaging or a container)."). Although the material of the dental crown form of Kennedy (co-polyester plastic) is described as not deforming and slumping as readily as previously used materials (see column 3, lines 36-39), Kennedy describes the need for a "stiffening flange 20" that "substantially strengthens the relatively thin structure of the tooth form, and prevents unwanted deformation of the form during storage and handling" (see column 3, lines 33-36). Thus, although the dental crown form of Kennedy is more "self-supporting" than previously used materials, Kennedy does not teach or suggest a dental article form wherein the

Amendment and Response

Page 12 of 13

Serial No.: 10/643,748

Confirmation No.: 4133

Filed: 19 August 2003

For: DENTAL ARTICLE FORMS AND METHODS

organic composition is dimensionally stable under the conditions described by Applicants without support of packaging or a container. See, e.g., page 5, lines 3-7. Applicants have amended the claims to clarify the invention.

Thus, it is respectfully submitted that these 103 rejections be withdrawn.

RECEIVED
CENTRAL FAX CENTER

Amendment and Response
Serial No.: 10/643,748
Confirmation No.: 4133
Filed: 19 August 2003
For: DENTAL ARTICLE FORMS AND METHODS

OCT 27 2006

Page 13 of 13

Summary

It is respectfully submitted that the pending claims 1-9, 11-39, and 42-44 are in condition for allowance and notification to that effect is respectfully requested. The Examiner is invited to contact Applicants' Representatives, at the below-listed telephone number, if it is believed that prosecution of this application may be assisted thereby.

Respectfully submitted
By
Mueting, Raasch & Gebhardt, P.A.
P.O. Box 581415
Minneapolis, MN 55458-1415
Phone: (612) 305-1220
Facsimile: (612) 305-1228

Date

October 27, 2006

By: Ann M. Mueting
Ann M. Mueting
Reg. No. 33,977
Direct Dial (612) 305-1217

CERTIFICATE UNDER 37 C.F.R. §1.8: The undersigned hereby certifies that this Facsimile Cover Sheet and the paper(s), as described hereinabove, are being transmitted by facsimile in accordance with 37 CFR §1.6(d) to the Patent and Trademark Office addressed to the Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 27th day of October, 2006, at 4:45 pm (Central Time).

Date

Signature: Sue Dambrook
Name: Sue Dambrook